

Dimensions. Body length, excluding antennae, 15.0 - 15.2 mm; length of thorax, 5.6 mm; length of wing, 11.8 mm.

Material examined. NEW SOUTH WALES: 14 km E of Robertson, 23 Nov 1973; 640 m, on *Leptospermum* blossom. AUSTRALIAN CAPITAL TERRITORY: Lee's Creek, Brindabella Range, 2 Jan 1975; both specimens in author's collection.

Habitat. The Brindabella specimen was taken about 11.00 am (Eastern Standard Time), walking amongst the stems of ferns at the edge of a creek. It is doubtful that the specimen was freshly emerged as it remained in good condition when pinned and dried. The Robertson specimen was feeding on *Leptospermum* blossom in mid afternoon.

Acknowledgement

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BUTTERFLIES IN NORTH-WESTERN NEW SOUTH WALES: NARRABRI AND BELLATA

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Abstract

Observations and collections of butterflies in the two north-western New South Wales localities of Narrabri and Bellata during the six month period July to December 1974 have been recorded.

Introduction

The township of Narrabri is situated 570 km NNW of Sydney, and Bellata lies another 48 km north of Narrabri. Both lie on the edge of the north-western plains, in an area very largely devoted to the growing of cereal crops and grazing. The area receives an average annual rainfall of 63 cm. Temperatures range broadly from - 4° to 45°C.

The observations for Narrabri were made primarily in the township itself more or less continuously during the six month period, July to December 1974. Those for Bellata resulted from collections made intermittently during the same period on a ridge bordering the village.

While there appear to be no previously published records of butterflies in the Narrabri area, some observations have been noted. Common and Waterhouse (1972) record the larval foodplant of *Theclinesstes onycha onycha* (Hewitson) at Narrabri. They also record the collection by C.W. Frazier of *Anisyntha albovenata weemala* Couchman at Mt. Kaputar, at 600 m. While Mt. Kaputar is popularly considered to be close to Narrabri, it is in fact some 55 km distant, and is ecologically distinct from the western plains. Narrabri is 210 m above sea level; the Mt. Kaputar National Park is mainly above 1000 m, the mountain itself reaching 1526 m. Collections or observations from the Mt. Kaputar area should be considered separately from those of Narrabri itself. (It is to be hoped that observations will be made of butterflies within the Mt. Kaputar National Park, similar to those of Smithers and Peters (1972) for the Warrumbungle National Park. The comparison would be of considerable interest.)

It should be noted that the season during which the following observations were made was one of the driest on record, with the district declared a drought area. Doubtless this had its effect on the insect life of the region.

The nomenclature used follows that of Common and Waterhouse (1972). Time periods given are those when adults were observed on the wing.

List of species

HESPERIIDAE

1. *Ocybadistes walkeri sothis* Waterhouse. Yellow banded dart. First appeared in numbers mid-September, then common through to December (Narrabri).

PAPILIONIDAE

2. *Papilio anactus* (W.S. Macleay). Dinky swallowtail. October to December. The species breeds on citrus at Narrabri and parasitism of pupae is common.
3. *Papilio aegeus aegeus* (Donovan). Orchard butterfly. October to December (Narrabri). First appeared in numbers early October. It breeds on citrus and there were two generations at Narrabri in 1974: larvae collected in May pupated June/July; larvae of next generation pupated December. Parasitism of final instar larva observed.
4. *Papilio demoleus sthenelus* W.S. Macleay. Chequered swallowtail. October to December (Narrabri).

PIERIDAE

5. *Catopsilia pyranthe crokera* (W.S. Macleay). Common migrant. One male (pale form) taken at Narrabri 25 Aug. 1974 while sheltering on a broad-bean leaf during rain.
6. *Catopsilia pomona pomona* (Fabricius). Lemon migrant. One male (pale form) taken at Narrabri 31 July 1974.
7. *Eurema smilax* (Donovan). Small grass yellow. September to December (Narrabri); August and September (Bellata).
8. *Elodina parthia* (Hewitson). Chalk white. August to December (Bellata).
9. *Elodina padusa* (Hewitson). Narrow-winged pearl white. September and October (Bellata).

10. *Delias aganippe* (Donovan). Wood white. August to October (Narrabri). Common and Waterhouse (1972) state that adults fly from September to March, but this could be extended. Several females were taken in August and the earliest was collected 2 August 1974.
11. *Delias nysa nysa* (Fabricius). Nysa jezebel. Only one female was collected at Narrabri 19 October 1974, and only males at Bellata in September. It seems that the species has a distribution considerably further westward in N.S.W. than that indicated by Common and Waterhouse (1972).
12. *Anaphaeis java teutonia* (Fabricius). Caper white. August to December at Narrabri. Only light form females were observed in August and September but from October to December dark form females were also present. The species became very numerous in late October to early December, with a peak late in November when 12 to 20 could be seen at any one time. At Bellata the species was noted from September to December. Specific observations made at the November peak period may be of interest:
 - a. Variation in size was considerable. Small specimens were observed in flight with normal sized adults. Wingspan measurements ranged from 51 - 64 mm (♂) and 50 - 66 mm (♀).
 - b. Flight continued until late in the evening. Ten minutes after sunset was the latest time of flight recorded.
 - c. Males were observed 'drinking' at wet lawn grass on a very warm day.
13. *Cepora perimale scyllara* (W. S. Macleay). Australian gull. One male taken at Bellata 12 September 1974. This is also a westward extension in N.S.W. of the distribution shown by Common and Waterhouse (1972).
14. *Pieris rapae rapae* (Linnaeus). Cabbage white. This species is firmly established at Narrabri, with adults in flight the year round, winter notwithstanding. At Bellata specimens were observed in October, but the species is not common in the open country.

NYMPHALIDAE

15. *Danaus chrysippus petilia* (Stoll). Lesser wanderer. Not observed within the town of Narrabri, but in the surrounding country during October and November. Observed in September at Bellata.
16. *Euploea core corinna* (W. S. Macleay). Oleander butterfly. November to December (Narrabri). Predation and frequent parasitism of pupae noted.
17. *Hypocysta pseudirius* Butler. Dinky ringlet. October (Bellata).
18. *Heteronympha merope merope* (Fabricius). Common brown. November (Narrabri).
19. *Polyura pyrrhus sempronius* (Fab.). Tailed emperor. November (Narrabri).
20. *Vanessa kershawi* (McCoy). Painted lady. October and December (Narrabri).
21. *Vanessa itea* (Fabricius). Australian admiral. July to December (Narrabri). One parasitized pupa collected.
22. *Precis villida calybe* (Godart). Meadow argus. September to December (Narrabri); August to October (Bellata).
23. *Acraea andromacha and omacha* (Fabricius). Glasswing. One male taken at Bellata 12 September 1974 (Narrabri).

LYCAENIDAE

24. *Nacaduba biocellata biocellata* (C. & R. Felder). Double-spotted lineblue. December (Narrabri).
25. *Lampides boeticus* (Linnaeus). Pea blue. September and October (Narrabri).
26. *Zizina otis labradus* (Godart). Common grass blue. September to December (Narrabri and Bellata).

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